IN THE SPECIFICATION

Please replace paragraph [0059] with the following marked up paragraph:

[0059]   A scale $j \in \{1...J\}$ is assigned to each block <u>of an image of size M x N,</u> so that a cost function Λ is maximized,

$$S_{opt} = \arg \max_{S \in \{1...J\}^{M \times N}} \Lambda(S, B) \tag{8}$$

where S_{opt} is the optimal segmentation map for the entire image, S is one of the <u>$J^{M \times N}$</u> ~~J^{MN}~~ possible labelings. ~~In one embodiment, each~~ <u>of</u> block<u>s</u> ~~represents a pixel of an image~~ of size <u>$m \times n$</u> ~~$M \times N$~~, <u>where there are</u> $\dfrac{M/2^j}{m} \times \dfrac{N/2^j}{n}$ <u>blocks of size</u> <u>$m \times n$</u> <u>at level</u>

$j \in \{1...J\}$, with each ~~pixel~~ <u>block</u> assigned one of the scales in $\{1...J\}$, and $\Lambda(S, B)$ yields the cost given any segmentation S and any entropy distribution B. ~~In another embodiment, S_{opt} is the optimal segmentation map for the image composed of blocks, greater than one pixel, of size $m \times n$.~~